

**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Raphael DONATI et al.

Attn: PCT Branch

Application No. New U.S. National Stage of PCT/FR04/00775

Filed: September 22, 2005

Docket No.: 125017

For: SOLID-PHASE IMMUNOCHROMATOGRAPHIC METHODS

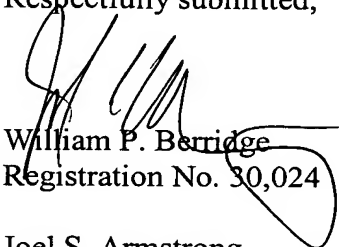
**TRANSLATION OF THE ANNEXES TO THE  
INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached hereto is a translation of the annexes to the International Preliminary Examination Report (Form PCT/IPEA/409). The attached translated material replaces the claims.

Respectfully submitted,



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## CLAIMS

1. A method for detecting an analyte in a liquid sample, comprising the following steps:
  - a) a porous solid support provided with a collection zone and a detection zone is provided, a capture reagent being immobilized in the detection zone;
  - b) the following are deposited, separately, successively and extemporaneously, in the collection zone of the porous solid support:
    - i) a binding reagent conjugated to a particulate label, the reagent being in liquid form,
    - ii) the liquid sample,
  - c) an amount of time sufficient for the migration, by capillary diffusion, of the binding reagent conjugated to a particulate label and of the liquid sample from the collection zone to the detection zone of the porous solid support is allowed to elapse,
  - d) the extent to which the binding reagent conjugated to a particulate label attaches in the detection zone is observed.
2. The method as claimed in claim 1, in which, in step b), the liquid sample is deposited upstream of the binding reagent conjugated to a particulate label, relative to the direction of migration from the collection zone to the detection zone of the porous solid support.
3. A method for detecting an analyte in a liquid sample, comprising the following steps:
  - a) a porous solid support provided with a collection zone and a detection zone is provided, a capture reagent being immobilized in the detection zone;

- b) the following are deposited, separately, successively and extemporaneously, in the collection zone of the porous solid support:
    - i) a binding reagent conjugated to a particulate label, the reagent being in liquid form,
    - ii) the liquid sample,
    - iii) a diluent in liquid form,
  - c) an amount of time sufficient for the migration, by capillary diffusion, of the binding reagent conjugated to a particulate label, of the liquid sample and of the diluent from the collection zone to the detection zone of the porous solid support is allowed to elapse,
  - d) the extent to which the binding reagent conjugated to a particulate label attaches in the detection zone is observed.
4. A method for detecting an analyte in a liquid sample, comprising the following steps:
- a) a porous solid support provided with a collection zone and a detection zone is provided, a capture reagent being immobilized in the detection zone;
  - b) the following are deposited, separately, successively and extemporaneously, in the collection zone of the porous solid support:
    - i) the liquid sample,
    - ii) a binding reagent conjugated to a particulate label, the reagent being in liquid form,
    - iii) a diluent in liquid form,
  - c) an amount of time sufficient for the migration, by capillary diffusion, of the binding reagent conjugated to a particulate label, of the liquid sample and of the diluent from the collection zone to the detection zone of the porous solid support is allowed to elapse,
  - d) the extent to which the binding reagent conjugated

to a particulate label attaches in the detection zone is observed.

5. The method as claimed in either of claims 3 and 4, in which, in step b), the diluent in liquid form is deposited upstream of the binding reagent conjugated to a particulate label and upstream of the liquid sample, relative to the direction of migration from the collection zone to the detection zone of the porous solid support.
6. The method as claimed in one of claims 1 to 5, in which the binding reagent conjugated to a particulate label and the capture reagent immobilized in the detection zone make it possible to detect the analyte by means of a sandwich assay.
7. The method as claimed in one of claims 1 to 5, in which the binding reagent conjugated to a particulate label and the capture reagent immobilized in the detection zone make it possible to detect the analyte by means of a competition assay.
8. The method as claimed in one of claims 1 to 7, in which the porous solid support is a porous solid support in the form of a chromatographic strip or narrow strip.
9. The method as claimed in one of claims 1 to 8, in which the porous solid support is integrated into a support to be gripped provided with at least one observation window for observing the extent to which the reagent conjugated to a particulate label attaches in the detection zone of the porous solid support.
10. The method as claimed in claim 9, in which the support to be gripped is provided with at least one

opening for depositing, respectively, the liquid sample, the binding reagent conjugated to a label and, where appropriate, the diluent, in the collection zone of the porous solid support.

11. The method as claimed in claim 2, in which the porous solid support is integrated into a support to be gripped provided with at least one observation window for observing the extent to which the reagent conjugated to a particulate label attaches in the detection zone of the porous solid support; the porous solid support being also provided with a first opening for depositing the binding reagent conjugated to a particulate label in the collection zone of the porous solid support and with a second opening, upstream of the first opening, for depositing the liquid sample in the collection zone of the porous solid support.

12. The method as claimed in claim 5, in which the porous solid support is integrated into a support to be gripped provided with at least one observation window for observing the extent to which the reagent conjugated to a particulate label attaches in the detection zone of the porous solid support; the support to be gripped being also provided with a first opening for depositing the binding reagent conjugated to a particulate label and the sample in the collection zone of the porous solid support, and with a second opening, upstream of the first opening, for depositing the diluent in liquid form in the collection zone of the porous solid support.

13. The method as claimed in one of claims 9 to 12, in which the support to be gripped consists of a casing.